

I claim:

1-4 (Canceled)

5. (New) An energy conservation flywheel with variable moment of inertia comprising: a top-shaped subassembly consisting of a hollow shaft and disk with a plurality of holes extending radially from the center of the top; sliding rods placed within these holes and coupled to an extension spring by flexible cables running through the hollow shaft at one end; steel sphere weights attached to the sliding rods at the other end for extending (sliding out) as centrifugal forces act on them when the top rotates in a horizontal plane, thus increasing mass moment of inertia while revolution and centrifugal forces start to decrease as centrifugal forces become equal to the extension spring force stretched to the length of weights' travel, at this point balancing out the spring tension force to overcome centrifugal forces; spring thus pulling weights inward to decrease moment of inertia and increase flywheel rotation; centrifugal forces again causing weights' travel out, thus overcoming spring balance tension and sliding outward in a continuous cycle.

6. (New) The energy conservation flywheel with variable moment of inertia of claim 5, further comprised of: a disk with a plurality of fine machined holes set at equal angles apart from the circumference toward its center; a plurality of square or oval cut-offs equally spaced near the center; A hollow shaft with a plurality of holes perpendicular to the shaft axis with inlet/outlet bells; a fine machined piston/rod, treaded on one side

with an axial hole and two treaded radial holes on the other side; flexible steel cables and a cable clip; a rotating spring with bearing and tension bolt/nut; a flexible coupling, detachable (or magnetic) clutch from any driver/driven device able to be detached such that the sum of moments of external forces about the axis is zero and attached again to use stored kinetic energy.

7. (New) The energy conservation flywheel with variable moment of inertia of claim 5, further including magnetic bearings.

8. (New) The energy conservation flywheel with variable moment of inertia of claim 5, further being fully contained in a vacuum canister.